

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 August 2005 (04.08.2005)

PCT

(10) International Publication Number
WO 2005/071110 A2

(51) International Patent Classification⁷: C12Q 1/68 (74) Agent: GILL JENNINGS & EVERY; Broadgate House, 7 Eldon Street, London EC2M 7HL (GB).

(21) International Application Number:
PCT/GB2005/000218

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 21 January 2005 (21.01.2005)

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(25) Filing Language: English

Published:

(26) Publication Language: English

— without international search report and to be republished upon receipt of that report

(30) Priority Data:

0401524.4 23 January 2004 (23.01.2004) GB
60/560,321 6 April 2004 (06.04.2004) US

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(71) Applicant (for all designated States except US): LINGVITAE AS [NO/NO]; Trimveien 6, A562, N-0372 Oslo (NO).

(71) Applicant (for AG only): JAPPY, John, William, Graham [GB/GB]; Gill Jennings & Every, 7 Eldon Street, London EC2M 7HL (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): LEXOW, Preben [NO/NO]; Lingvitae AS, Trimveien 6, A562, N-0372 Oslo (NO).



A2

A2

(54) Title: IMPROVING POLYNUCLEOTIDE LIGATION REACTIONS

(57) Abstract: The method of the invention is useful in quantifying the absolute or relative number of unique molecules present in a sample after carrying out an analysis procedure on the sample, and comprises the steps of: (i) attaching a unique molecular tag to substantially all of the molecules in the sample; (ii) carrying out the analysis procedure using the molecules of the sample; and (iii) on the basis of the molecular tags determining the absolute or relative number of unique molecules present in the original sample which underwent the analysis procedure.

WO 2005/071110